AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A radiation focussing element having at least one surface ~~of which is~~ provided with at least one diffraction grating that is distorted substantially according to a quadratic function.

2. (currently amended) A focussing element according to claim 1 wherein the focussing element surface comprises a radiation reflector ~~providing said surface~~.

3. (currently amended) A focussing element according to claim 1 wherein the focussing element surface comprises a radiation transmissive material ~~lens providing said surface~~.

4. (currently amended) A focussing element according to claim 3 wherein only one surface of the lens is provided with ~~a~~ said grating.

5. (currently amended) A focussing element according to claim 3 wherein ~~the~~ dispersion inherent in the grating is reduced by the lens itself, or by at least one ~~or more~~ refractive element~~(s) thereof~~.

6. (previously presented) A focussing element according to claim 1 wherein the grating is a phase grating.

7. (previously presented) A focussing element according to claim 1 wherein the grating is an amplitude grating.

8. (previously presented) A focussing element according to claim 1 wherein the grating is provided in a layer covering at least part of said surface.

9. (original) A focussing element according to claim 8 wherein said layer is made of a glassy composition.

10. (currently amended) A focussing element according to claim ~~7~~8 wherein said layer is made of a radiation obscuring material.

11. (previously presented) A focussing element according to claim 8 wherein said layer is shaped.

12. (original) A focussing element according to claim 2 wherein the reflector comprises a reflective layer on a substrate, and said reflective layer is shaped to provide said grating.

13. (previously presented) A focussing element according to claim 1 wherein the grating is provided in the surface of the bulk element itself.

14. (previously presented) A focussing element according to claim 1 and further comprising a mask on at least one surface of the element to provide an aperture.

15. (currently amended) A focussing element according to claim 14 wherein a said mask is provided in a layer on a single surface of the focussing element.

16. (previously presented) A focussing element according to claim 14 wherein said mask and said grating are provided on the same surface of the focussing element.

17. (previously presented) A transmissive focussing element according to claim 14 wherein said mask and said grating are provided on the opposed surfaces of the focussing element.

18. (previously presented) A radiation focussing element according to claim 1 for use with optical radiation.

19. (previously presented) A method of making an element according to claim 11 wherein the grating is formed by embossing.

20. (previously presented) A method of making an optical element according to claim 11 wherein the grating is formed by selective etching.

21. (original) A method of making an optical element according to claim 6 wherein the focussing element is a transmissive lens and the grating is formed by moulding during manufacture of the lens.

22. (previously presented) A three-dimensional imaging system comprising an element according to claim 1.

23. (previously presented) A wavefront sensor comprising an optical element according to claim 1.